

PREVENTION

The following five biosecurity measures will help prevent SECD viruses from entering your farm:

1. Incoming animals:

- Buy replacement animals from known negative herds or have them tested prior to coming on to your farm. Talk to your veterinarian or the New Jersey AHDL about testing.
- Isolate (in a separate area away from general traffic flow and other animals) and monitor new arrivals for **one week** for any signs of diarrhea.

2. Vehicles:

- Limit vehicle access to your farm.
- Have all vehicles park as far away as possible from pig areas.
- Haulers should come with a clean and disinfected truck to pick up pigs.
- Establish a Line of Separation that should not be crossed by vehicles
- When hauling pigs to markets and sales, wash and disinfect your vehicles before returning to the farm. Be sure to get the undercarriage and tires.
- When cleaning vehicles, first remove any visible dirt and manure with detergent and water. Then mix and apply disinfectants (according to label directions), that have been shown to be effective against the SECD viruses.
- Care should be taken with carcass disposal to maintain your Line of Separation.

LINE OF SEPARATION is the line between the area that is to be used by the transporters and visitors and the area that is to be used by farm personnel and your animals.

3. People:

- Limit visitors to your farm.
- Ask if visitors have had contact with pigs recently.
- If people need to come onto your farm, require all visitors to wear plastic boots over their clean shoes and outer clothing or prevent them from crossing your Line of Separation.
- Maintain a minimum of an overnight period of downtime between farm visits for yourself and visitors.
- Avoid visiting other pig farms, livestock markets, slaughter plants, shows or feed stores. If you do visit these places, change clothing and shoes before entering your animal facilities

4. Fomites

- Many agents (fomites such as clothing, shoes, bedding) can absorb and transmit SECD viruses.
- Keep pets, such as dogs and cats, away from the pig areas.
- Exclude all rodents and other pests, including wildlife and birds, from your buildings.
- Regularly clean and disinfect all equipment that is in contact with pigs.
- Clean and disinfect boots before walking on different areas of your property, especially before entering the farrowing and nursing area.

5. Contaminated Feed

- Avoid last minute deliveries.
- Hold feed two weeks before feeding.



CONTACT INFORMATION

Division of Animal Health

New Jersey Department of Agriculture

Phone: 609-671-6400, Fax: 609-671-6413

Email: state.veterinarian@ag.state.nj.us

www.state.nj.us/agriculture

New Jersey Animal Health Diagnostic Laboratory

Phone: 609-406-6999, Fax: 609-671-6414

www.jerseyvetlab.nj.gov

USDA-APHIS-VS Office

Phone: 609-259-5260, Fax: 609-259-2477

Resources for more information on SECD

- <http://www.nj.gov/agriculture/divisions/ah/prog/swineentericdiseases.html>
- <http://www.pork.org/pork-checkoff-research/pedv/pedv-resources/>
- https://www.aphis.usda.gov/aphis/ourfocus/animalhealth?urlile=wcm%3apath%3a%2Faphis_content_library%2Fsa_our_focus%2Fsa_animal_health
- Recommended Disinfectants: http://www.aphis.usda.gov/animal_health/animal_dis_spec/swine/downloads/effective-disinfectants.pdf

Pictures Courtesy of the National Pork Board



SWINE ENTERIC CORONAVIRUS DISEASE (SECD)

A New Threat for Your Pigs



What is Swine Enteric Coronavirus Disease (SECD)?

SECD is a gastrointestinal disease in swine that can create tremendous financial losses for pork producers. It leads to severe diarrhea capable of spreading throughout your farm and causing death, primarily in young pigs, due to dehydration.

It refers to two disease agents:

- Porcine Epidemic diarrhea Virus (PEDV)
- Porcine Delta Coronavirus (PDCoV)

Both viruses have been seen in pigs in other parts of the world. SECD recently entered the United States in the spring of 2013 and has quickly spread throughout the country.

SECD only affects pigs. It is not a public health or food safety concern.

SIGNS OF SECD

- Signs include diarrhea, vomiting, off-feed and listlessness.
- Young pigs are more severely affected and become dehydrated from diarrhea and die. As pigs get older (nursery and finisher), the number of infections decrease and the clinical signs are not as serious.
- Adult pigs may show diarrhea, vomiting and loss of appetite. Sows may occasionally abort due to the stress of the disease.
- Clinical signs of SECD infections vary with age and past exposure to the virus. If pigs on the farm have no prior exposure, all age groups will be affected.
- Incidence of SECD increases in cooler times of the year, especially from December to February.



HOW SECD SPREADS

The virus is spread by the **fecal-oral route**. Animals must ingest the virus from infected feces. SECD viruses are shed in extremely large amounts only in feces of infected animals. It is highly contagious and only a very small amount of virus is needed to infect a pig. Clinical signs of SECD begin 12-24 hours after ingestion of the virus.

The SECD virus can live in the environment for a long period of time. It can survive 7 days in feces, water and dry feed and up to 28 days in wet feed and frozen manure.



The five major ways the virus is spread are:

1. Infected animals entering your herd
2. Vehicles that come from an infected premises
3. People or fomites (shovel, boots, and clothes)
4. Birds, pets and wildlife
5. Contaminated feed

IMMUNITY

SECD infection gives 3-6 months of immunity to the disease, but pigs can become re-infected.

Sows that have developed immunity to the viruses can protect their suckling pigs through maternal antibodies present in colostrum. When pigs are weaned, they can become susceptible to the SECD viruses again due to the stress of weaning and a drop in antibody levels delivered from colostrum.



Use of targeted feedback (the intentional feeding of virus to induce infection) and vaccines can help build immunity in pigs. These management tools should be used under the supervision of your veterinarian.

DIAGNOSIS

Diagnosis of the disease cannot be done with clinical signs only. SECD looks similar to other diseases that can cause diarrhea in pigs. Therefore, **laboratory testing is needed to make the correct diagnosis.**

The NJ Animal Health Diagnostic Laboratory (AHDL) can help if you or your veterinarian suspects SECD in your pigs. Through a State/Federal cooperative SECD control program, subsidized lab testing is available with proper documentation. More information on what samples to submit for testing, as well as shipping and delivery options can be found on the AHDL website (www.jerseyvetlab.nj.gov) or by calling the lab (609-406-6999).

TREATMENT

Affected pigs can be treated with supportive measures including electrolyte solutions, to maintain their hydration, and anti-inflammatory medicine.



CONTROL

A Federal Order issued on June 5, 2014 requires the reporting of SECD to the Division of Animal Health, New Jersey Department of Agriculture (609-671-6400) or the USDA-APHIS-VS (609-259-5260).

In a Confirmed Positive Herd (a positive laboratory submission and pigs with diarrhea), State and USDA-APHIS-VS veterinarians will work together to cooperatively develop a Herd Management Plan with you and your veterinarian.

The goal of the Herd Management Plan would be to decrease the shedding and spread of the SECD viruses.